

## ABSTRACT

~~The invention relates to a~~ method of for concentrating and eliminating ~~in~~ radionuclides from water from in nuclear pools ~~which is based on the capacity of micro-organisms~~ microorganisms when they are growing to retain radionuclides by forming biofilms on the colonised colonized surfaces. ~~Until now, the inventive method, known as bioremediation, has not been used in the containment area of nuclear power stations. At present, radioactive water in nuclear pools is clarified with a system of demineraliser filters which, when at the end of their working life, generate a considerable amount of radioactive material which has to be managed.~~ The method of the invention utilizes the colonization of microorganisms in the water for the involving bioremediation, ~~which is~~ Preferably the bioremediation is performed before the water is passed through demineralizing aforementioned filters, prolongs to prolong the life of said such filters. As a result, there is less radioactive waste to be managed, thereby increasing the profitability of the method.